

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-7. (Canceled)

8. (Withdrawn, Currently Amended) A method of isolating a population of human mesenchymal stem cells comprising performing density gradient centrifugation on human bone marrow; and isolating human mesenchymal stem cells from a fraction having a density of 1.050-1.070 g/ml wherein the human mesenchymal stem cells make up at least 70% of the fraction.

9. (Canceled)

10. (Withdrawn, Currently Amended) The method according to claim ~~[[9]]~~8, wherein ~~said isotonic solution is Percoll® and~~ said density is 1.068 g/ml.

11. (Currently Amended) A population of human mesenchymal stem cells obtained according to a method comprising performing density gradient centrifugation on human bone marrow; and isolating human mesenchymal stem cells from a fraction having a density of 1.050-1.070 g/ml, wherein the human mesenchymal stem cells make up at least 70% of the fraction.

12. (Canceled)

13. (Currently Amended) The mesenchymal stem cell of claim ~~[[12]]~~11 wherein ~~said isotonic solution is Percoll® and~~ said density is 1.068 g/ml.

14. (Currently Amended) A pharmaceutical preparation comprising a population of human mesenchymal stem cells obtained according to a method comprising

performing density gradient centrifugation on bone marrow; and  
isolating human mesenchymal stem cells from a fraction having a density of 1.050-1.070 g/ml,  
wherein the human mesenchymal stem cells make up at least 70% of the fraction.

15. (Canceled)

16. (Currently Amended) The pharmaceutical preparation of claim ~~[[15]]~~14 wherein ~~said~~  
~~isotonic solution is Percoll® and~~ said density is 1.068 g/ml.

17. (Previously Presented) The pharmaceutical preparation of claim 14 further comprising a  
pharmaceutically acceptable excipient and/or carrier.

18. (Canceled)

19. (Previously Presented) The pharmaceutical preparation of claim 16 further comprising a  
pharmaceutically acceptable excipient and/or carrier.

20. (Canceled)